

AMENDMENT TO THE SPECIFICATION:

In accordance with the Revised Rules under 37 C.F.R. 1.121, please amend the paragraphs of the specification shown below:

Please amend the paragraph beginning on page 1, line 19 and ending on page 2, line 11 as follows:

Fig. 21 is a longitudinal sectional view showing the structure of a CPP-GMR head using a conventional CPP-GMR element. A CPP-GMR head 100 comprises a lower shield layer 110 extending in the X direction shown in the drawing, a lower nonmagnetic metal film 120 formed on the lower shield layer 110 at its center in the X direction, and a free magnetic layer 131, a nonmagnetic metallic material layer 132, a pinned magnetic layer 133, an antiferromagnetic layer 134, and an upper nonmagnetic metal film 140, which are laminated on the lower nonmagnetic metal film 120. The pinned magnetic layer 133 may further include a first pinned magnetic layer 133a, a non-magnetic intermediate layer 133b and a second pinned magnetic layer 133c. The CPP-GMR head 100 further comprises an upper shield layer 150 formed over the upper nonmagnetic metal film 140 to extend in the X direction, hard bias layers 163 in contact with parts of the free magnetic layer 131 and with both sides of the nonmagnetic layer 132, insulating layers 161 filling in the respective spaces between the hard bias layers 163 and the lower shield layers 110, and insulating layers 164 filling in the respective spaces between the hard bias layers 163 and the upper shield layer 150. Furthermore, bias underlying layers 162 are disposed between the hard bias layers 163 and the insulating layers 161.